CLAIMS

1. Seal in flexible graphite with a metal envelope at high temperature including:

- A flexible core (10, 40); and
- A metal envelope (12, 42) surrounding the flexible core,

Characterised

- by the fact that it includes a sheath (15, 25, 35, 45) hermetically sealed inside of which is placed a unit composed of the envelope(12, 42) and the flexible core (10, 40)
- by the fact that the sheath(15, 25) is in two parts welded in a mid plane of the seal and
- by the fact that the metal envelope is in two cups (12, 42) not completely surrounding the flexible core(10, 40).

2. Seal according to claim 1, characterised by the fact that the flexible core (10, 40) is in flexible graphite.

3. Seal according to claim 1, characterised by the fact that the inside of the sheath (15, 25, 35, 45) is maintained in a relative vacuum.

4. Seal according to claim 1 characterised by the fact that the inside of the sheath (15, 25, 35, 45) is maintained in neuter gas.

5. Seal according to claim 1, characterised by the fact that the sheath (15, 25, 35, 45) is metallic.

6. Seal according to claim 1 characterised by the fact that the sheath (35, 45) is in four parts,

a higher part(36S, 46S), a lower part (36I, 46I) and two lateral parts (36L, 46L) welded together.

7. Seal according to claim 1 characterised by the fact that the sheath (45) is in two parts, a higher part (46S) and a lower part (46I) welded at the level of two edges opposite the quadrilateral formed by the total seal.

8. Seal according to claim 1 characterised by the fact that the seal unit is of a square section.

9. Seal according to claim 1 characterised by the fact that the seal unit is of a rectangular section.

10. Seal according to claim 9 characterised by the fact that the cups (12, 42) have projections (14, 44) placed at the side where the sheath must be under load.